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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/909,988	07/23/2001	Shigeru Tanaka	Q64671	1372

7590 12/23/2003  
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EXAMINER

PRONE, JASON D

ART UNIT	PAPER NUMBER
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3724

DATE MAILED: 12/23/2003

19

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application N .

09/909,988

Applicant(s)

TANAKA ET AL.

Examiner

Jason Prone

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 October 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3,6-8,10,12 and 22-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,6-8,10,12 and 22-24 is/are rejected.
- 7) ☒ Claim(s) 25 and 26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 July 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All   b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_                      6) ☐ Other: \_\_\_\_\_

***DETAILED ACTION***

***Election/Restrictions***

1. Applicant's election without traverse of Group I in Paper No. 18 is acknowledged.
2. Claims 4, 5, and 11 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 18.

***Drawings***

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the detector, the comparator, the output element, the ammeter, and the microcomputer, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Specification***

4. The specification is objected to under 37 CFR 1.71, as being confusing and difficult to comprehend the invention and compare with prior art. For example, the following is not understood: It is unclear how the detector works, what structure it incorporates, and where it is located on the cutting assembly. It is unclear how the comparator works, what structure it incorporates, and where it is located on the cutting assembly. It is unclear how the output element works, what structure it incorporates, and where it is located on the cutting assembly. It is unclear how the ammeter works,

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what structure it incorporates, and where it is located on the cutting assembly. See the rejections under 35 USC § 112, first paragraph for more details

Applicant is required to submit an amendment which clarifies the disclosure so that the examiner may make a proper comparison of the invention with the prior art.

Applicant should be careful not to introduce any new matter into the disclosure (i.e., matter which is not supported by the disclosure as originally filed).

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1, 3, 6-8, 10, 12, and 22-26 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

It is unclear how the detector detects a value of a parameter representing a cutting resistance. The specification fails to disclose a detail description and the Figures do not represent the detector, therefore the structure and location is unclear. It is unclear how the comparator works with the detector to compare the detected value. The specification fails to disclose a detail description and the Figures do not represent the comparator, therefore the structure and location is unclear. It is unclear how the output element works with the comparator to output a result. The specification fails to disclose a detail description and the Figures do not represent the output element,

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therefore the structure and location is unclear. It is unclear how the ammeter works with the detector to measure the value of the current. The specification fails to disclose a detail description and the Figures do not represent the ammeter, therefore the structure and location is unclear. The specification fails to disclose a detail description and the Figures do not represent the comparator in a microcomputer, therefore the structure and location is unclear.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1, 3, 6-8, 10, 12, and 22-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. In regards to claim 1, it is unclear how the detector works and what structure it incorporates. It is unclear how the comparator works and what structure it incorporates. It is unclear how the output element works and what structure it incorporates.

10. In regards to claim 3, it is unclear how the ammeter works and what structure it incorporates.

11. In regards to claim 7, it is unclear how the comparator is incorporated into a microcomputer.

***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 1, 3, and 6-7 are rejected, as best understood, under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. in view of Iwasaki. Watanabe et al. discloses the invention including an apparatus of estimating a lifetime of a cutter (Abstract), a detector for detecting a value of a parameter (Column 7 lines 28-30), a comparator (62), an output element (Column 7 lines 21-28), that the comparator determines if the cutter is unfit for use (Column 7 lines 28-30), that the comparator is in a microcomputer (Fig. 6), and a motor driving the cutter (8) but fails to disclose that the parameters detected are a value of current loaded on the motor and an ammeter is used to measure the value of current. Iwasaki teaches the use of detecting the value of current loaded on the motor parameter (Column 1 lines 19-27). Examiner notes that current is measured in amps and an ammeter is used to measure amps therefore it is inherent that an ammeter would be present. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided Watanabe et al. with a current load detector, as taught by Iwasaki, for an alternate method of detecting wear.

14. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. in view of Iwasaki as applied to claim 1 above. The Watanabe et al. does not teach the use of a visual display, however, official notice is taken that the use of an output element comprising a visual display is old and well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided Watanabe et al. with an output element comprising a visual display for an easier way of seeing the output element.

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15. Claims 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. in view of Iwasaki as applied to claim 1 above, in further view of Kiyohara et al.. Watanabe et al. in view of Iwasaki disclose the invention including the apparatus for estimating the lifetime of a cutter (see above) but fail to disclose a fixed blade, a movable blade that is movable along the fixed blade, a receiving element that is movable together with the movable blade, a support for supporting the movable blade and a support for supporting the receiving element, and that the supports are intergral with one another. Kiyohara et al. teaches a fixed blade (94), a movable blade that is movable along the fixed blade (42), a receiving element that is movable together with the movable blade (82), a support for supporting the movable blade (80) and a support for supporting the receiving element (80), and that the supports are intergral with one another (Fig. 7). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided Watanabe et al. in view of Iwasaki with the cutting apparatus, at taught by Kiyohara et al., to allow for the cutting of a flexible web.

16. Claims 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. in view of Iwasaki as applied to claims 1, 3, and 6-8 above. In light of the apparatus rejection, the method is inherent.

***Allowable Subject Matter***

17. Claims 25 and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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***Response to Arguments***

18. Applicant's arguments with respect to claims 1, 3, 6-8, 10, and 12 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kitai et al., Yokota et al., Sanpei, Saito et al., Rosenthal et al., Kanbe, and Kohda et al.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Prone whose telephone number is 703-605-4287. The examiner can normally be reached on 7:30-5:00, Mon - (every other) Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan N. Shoap can be reached on 703-308-1082. In lieu of mailing, it is encouraged that all formal responses be faxed to 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.



JP  
December 15, 2003



Allan N. Shoap  
Supervisory Patent Examiner  
Group 3700